# Dell™ E2009W/E2209W Flat Panel Monitor User's Guide

**About Your Monitor** 

Setting Up the Monitor

Operating the Monitor

**Troubleshooting** 

<u>Appendix</u>

# Notes, Notices, and Cautions



**NOTE**: A NOTE indicates important information that helps you make better use of your computer.



**NOTICE:** A NOTICE indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.



CAUTION: A CAUTION indicates a potential for property damage, personal injury, or death.

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Model E2009Wt, E2009Wf, E2209Wc.

September 2008 Rev. A00

### **About Your Monitor**

Dell™ E2009W/E2209W Flat Panel Monitor User's Guide

- Package Contents
- Product Features
- Identifying Parts and Controls
- Monitor Specifications
- Plug and Play Capability
- Maintenance Guidelines

## **Package Contents**

Your monitor ships with the components shown below. Ensure that you have received all the components and contact Dell if something is missing.

NOTE: Some items may be optional and may not ship with your Monitor. Some features or media may not be available in certain countries.





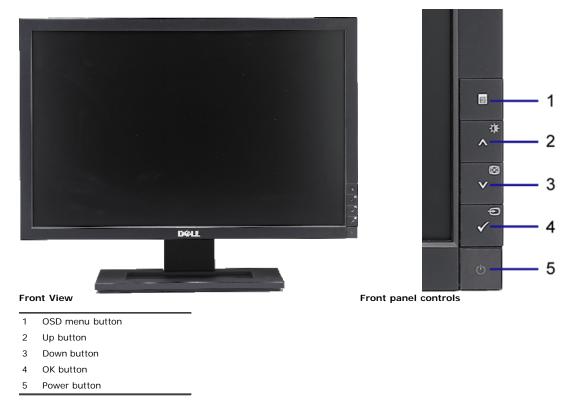
#### **Product Features**

The Dell™ E2009W/E2209W flat panel display has an active matrix, thin-film transistor (TFT), liquid crystal display (LCD). The monitor features include:

- E2009W:20-inch (508 mm) viewable area display.
- E2209W:22-inch (558.68 mm) viewable area display.
- 1680 x 1050 resolution, plus full-screen support for lower resolutions.
- Wide viewing angle to allow viewing from a sitting or standing position, or moving side-to-side.
- Tilt adjustment capabilities.
- Plug and play capability if supported by your system.
- On-Screen Display (OSD) adjustments for ease of set-up and screen optimization.
- Software and documentation media includes an information file (INF), Image color Matching File (ICM), and product documentation.
- Energy Saver feature for Energy Star compliance.
- Asset Management Capable.

## **Identifying Parts and Controls**

#### **Front View**



#### **Back View**





Back view

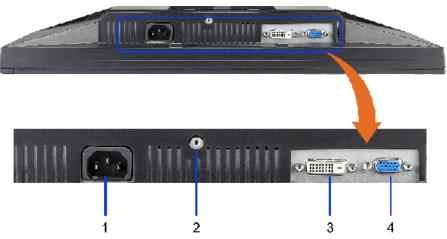
Back View with monitor stand

|   | Label   | Description/Use  |
|---|---|--|
| 1 | VESA mounting holes (100mm)<br>(Behind attached VESA plate) | Use to mount the monitor.  |
| 2 | Barcode serial number label                                 | Refer to this label if you need to contact Dell for technical support. |
| 3 | Security lock slot  | Use a security lock with the slot to help secure your monitor.         |
| 4 | Dell Soundbar mounting brackets                             | Attach the optional Dell Soundbar.                                     |
| 5 | Stand removal button  | Press to release the stand.  |
| 6 | Regulatory rating label                                     | Lists the regulatory approvals.  |
| 7 | Cable management slot                                       | Help organize cables by placing them through the slot.                 |

## **Side View**



### **Bottom View**



#### **Bottom view**

| Label | Description             |
|-------|-------------------------|
| 1     | AC power cord connector |
| 2     | Stand lock              |
| 3     | DVI connector           |
| 4     | VGA connector           |

# **Monitor Specifications**

## **Flat Panel Specifications**

| Model   | E2009W                                     | E2209W                                     |  |
|---|--|--|--|
| Screen type   | Active matrix - TFT LCD                    | Active matrix - TFT LCD                    |  |
| Panel type  | TN   | TN   |  |
| Screen dimensions 20 inches (20-inch viewable image size) |  | 22 inches (22-inch viewable image size)    |  |
| Preset display area:                                      |  |  |  |
| Horizontal  | 433.44 mm (17.06 inches)                   | 473.76 mm (18.7 inches)                    |  |
| Vertical  | 270.90 mm (10.67 inches)                   | 296.1 mm (11.7 inches)                     |  |
| Pixel pitch   | 0.258 mm                                   | 0.282 mm                                   |  |
| Viewing angle   | 160° (vertical) typ, 170° (horizontal) typ | 160° (vertical) typ, 170° (horizontal) typ |  |
| Luminance output  | 300 cd/m <sup>2</sup> (typ)                | 300 cd/m <sup>2</sup> (typ)                |  |
| Contrast ratio  | 1000 to 1 (typ)                            | 1000 to 1 (typ)                            |  |
| Faceplate coating   | Antiglare with hard-coating 3H             | Antiglare with hard-coating 3H             |  |
| Backlight   | CCFL (4) edgelight system                  | CCFL (4) edgelight system                  |  |
| Response Time   | 5ms typical                                | 5ms typical                                |  |
| Color gamut (Typical)                                     | 85%*                                       | 85%**                                      |  |

<sup>\*</sup> E2009W color gamut (typical) is based on CIE1976 (85%) and CIE1931 (72%) test standards.

## **Resolution Specifications**

| Model                     | E2009W/E2209W                |
|---------------------------|------------------------------|
| Horizontal scan range     | 30 kHz to 83 kHz (automatic) |
| Vertical scan range       | 56 Hz to 75 Hz (automatic)   |
| Optimal preset resolution | 1680 x 1050 at 60 Hz         |
| Highest preset resolution | 1680 x 1050 at 60 Hz         |

<sup>\*\*</sup> E2209W color gamut (typical) is based on CIE1976 (85%) and CIE1931 (72%) test standards.

## **Video Supported Modes**

| Model                                     | E2009W/E2209W                                       |
|---|---|
| Video display capabilities (DVI playback) | 480i/480p/576i/576p/720p/1080i/1080p (Support HDCP) |

# **Preset Display Modes**

| Display Mode      | Horizontal Frequency<br>(kHz) | Vertical Frequency<br>(Hz) | Pixel Clock<br>(MHz) | Sync Polarity<br>(Horizontal/Vertical) |
|-------------------|-------------------------------|----------------------------|----------------------|--|
| VESA, 720 x 400   | 31.5                          | 70.0                       | 28.3                 | -/+                                    |
| VESA, 640 x 480   | 31.5                          | 60.0                       | 25.2                 | -/-                                    |
| VESA, 640 x 480   | 37.5                          | 75.0                       | 31.5                 | -/-                                    |
| VESA, 800 x 600   | 37.9                          | 60.0                       | 40.0                 | +/+                                    |
| VESA, 800 x 600   | 46.9                          | 75.0                       | 49.5                 | +/+                                    |
| VESA, 1024 x 768  | 48.4                          | 60.0                       | 65.0                 | -/-                                    |
| VESA, 1024 x 768  | 60.0                          | 75.0                       | 78.8                 | +/+                                    |
| VESA, 1152 x 864  | 67.5                          | 75.0                       | 108.0                | +/+                                    |
| VESA, 1280 x 1024 | 64.0                          | 60.0                       | 135.0                | +/+                                    |
| VESA, 1280 x 1024 | 80.0                          | 75.0                       | 135.0                | +/+                                    |
| VESA, 1680 x 1050 | 65.2                          | 60.0                       | 146.3                | -/+                                    |
| VESA, 1680 x 1050 | 64.6                          | 60.0                       | 119.0                | +/-                                    |

# **Electrical Specifications**

| Model                              | E2009W/E2209W  |
|------------------------------------|--|
| Video input signals                | Analog RGB, 0.7 Volts +/-5%, positive polarity at 75 ohm input impedance<br>Digital DVI-D TMDS, 600mV for each differential line, positive polarity at 50 ohm input<br>impedance |
| Synchronization input signals      | Separate horizontal and vertical synchronizations, polarity-free TTL level, SOG (Composite SYNC on green)  |
| AC input voltage/frequency/current | 100 to 240 VAC/50 or 60 Hz ± 3 Hz/2.0A (Max.)  |
| Inrush current                     | 120V: 40A (Max.)<br>240V: 80A (Max.)   |

# **Physical Characteristics**

| Model                      | E2009W  | E2209W  |  |
|----------------------------|---|---|--|
| Connector type             | 15-pin D-subminiature, blue connector; DVI-D, white connector             | 15-pin D-subminiature, blue connector; DVI-D, white connector             |  |
| Signal cable type          | Digital: Detachable, DVI-D, Solid pins, shipped detached from the monitor | Digital: Detachable, DVI-D, Solid pins, shipped detached from the monitor |  |
| orginal duble type         | Analog: Detachable, D-Sub, 15pins, shipped attached to the monitor        | Analog: Detachable, D-Sub, 15pins, shipped attached to the monitor        |  |
| Dimensions (with stand)    |   |   |  |
| Height                     | 14.96 inches (380.0 mm)   | 16.01 inches (406.7 mm)   |  |
| Width                      | 18.5 inches (470.0 mm)  | 20.13 inches (511.2 mm)   |  |
| Depth                      | 6.24 inches (158.5 mm)  | 6.44 inches (163.9 mm)  |  |
| Dimensions (without stand) |   |   |  |
| Height                     | 12.1 inches (310.0 mm)  | 13.15 inches (334.0 mm)   |  |
| Width                      | 18.5 inches (470.0 mm)  | 20.13 inches (511.2 mm)   |  |
| Depth                      | 2.76 inches (70.0 mm)   | 2.54 inches (64.5 mm)   |  |
| Stand dimensions           |   |   |  |
| Height                     | 11.34 inches (288.0 mm)   | 12.39 inches (314.7 mm)   |  |
| Width                      | 10.26 inches (260.5 mm)   | 10.47 inches (265.9 mm)   |  |
|                            |   |   |  |

| Depth   | 6.24 inches (158.5 mm) | 6.44 inches (163.7 mm) |
|---|------------------------|------------------------|
| Weight  |                        |                        |
| Weight with packaging   | 14.15 lbs (6.42 kg)    | 16.76 lbs (7.62 kg)    |
| Weight with stand assembly and cables   | 10.80 lbs (4.90 kg)    | 13.16 lbs (5.98 kg)    |
| Weight without stand assembly<br>(For wall mount or VESA mount<br>considerations - no cables) | 8.10 lbs (3.68 kg)     | 11.92 lbs (5.41 kg)    |
| Weight of stand assembly  | 2.64 lbs (1.20 kg)     | 2.73 lbs (1.24 kg)     |

#### **Environmental Characteristics**

| Model               | E2009W/E2209W   |
|---------------------|---|
| Temperature         |   |
| Operating           | 5° to 35°C (41° to 95°F)  |
| Non-operating       | Storage: -20° to 60°C (-4° to 140°F)<br>Shipping: -20° to 60°C (-4° to 140°F) |
| Humidity            |   |
| Operating           | 10% to 80% (non-condensing)   |
| Non-operating       | Storage: 5% to 90% (non-condensing)<br>Shipping: 5% to 90% (non-condensing)   |
| Altitude            |   |
| Operating           | 3,657.6m (12,000 ft) max  |
| Non-operating       | 12,192 m (40,000 ft) max  |
| Thermal dissipation | 256.08 BTU/hour (maximum)<br>153.6 BTU/hour (typical)                         |

#### **Power Management Modes**

If you have VESA's DPM $^{\text{TM}}$  compliance display card or software installed in your PC, the monitor can automatically reduce its power consumption when not in use. This is referred to as *Power Save Mode*\*. If the computer detects input from keyboard, mouse, or other input devices, the monitor automatically resumes functioning. The following table shows the power consumption and signaling of this automatic power saving feature:

#### E2009W

| VESA Modes       | Horizontal Sync | Vertical Sync | Video   | Power Indicator | Power Consumption             |
|------------------|-----------------|---------------|---------|-----------------|-------------------------------|
| Normal operation | Active          | Active        | Active  | Blue            | 38 W (typical)/43 W (maximum) |
| Active-off mode  | Inactive        | Inactive      | Blanked | Amber           | Less than 2 W                 |
| Switch off       | -               | -             | -       | Off             | Less than 1 W                 |

#### E2209W

| VESA Modes       | Horizontal Sync | Vertical Sync | Video   | Power Indicator | Power Consumption             |
|------------------|-----------------|---------------|---------|-----------------|-------------------------------|
| Normal operation | Active          | Active        | Active  | Blue            | 40 W (typical)/45 W (maximum) |
| Active-off mode  | Inactive        | Inactive      | Blanked | Amber           | Less than 2 W                 |
| Switch off       | -               | -             | -       | Off             | Less than 1 W                 |

The OSD will only function in the *normal operation* mode. When the **menu** or **plus** buttons are pressed in Active-off mode, one of the following messages will be displayed: Analog Input In Power Save Mode. Press Computer Power Button or Any Key on Keyboard or Move Mouse

Digital Input In Power Save Mode. Press Computer Power Button or Any Key on Keyboard or Move Mouse

Activate the computer and the monitor to gain access to the OSD.



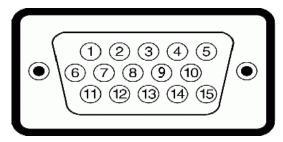


NOTE: This monitor is ENERGY STAR ®-compliant as well as TCO '99/TCO '03 power management compatible.

\* Zero power consumption in OFF mode can only be achieved by disconnecting the main cable from the monitor.

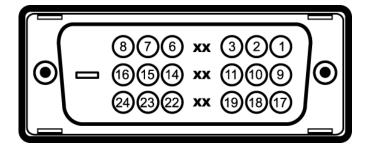
#### **Pin Assignments**

#### **VGA Connector**



| Pin 15-pin Side of the Connected Signal Number Cable |                  |  |
|--|------------------|--|
| 1  | Video-Red        |  |
| 2  | Video-Green      |  |
| 3  | Video-Blue       |  |
| 4  | GND              |  |
| 5  | Self-test        |  |
| 6  | GND-R            |  |
| 7  | GND-G            |  |
| 8  | GND-B            |  |
| 9  | Computer 5V/3.3V |  |
| 10   | GND-sync         |  |
| 11   | GND              |  |
| 12   | DDC data         |  |
| 13   | H-sync           |  |
| 14   | V-sync           |  |
| 15   | DDC clock        |  |

### **DVI** Connector



| Pin<br>Number | 24-pin Side of the Connected Signal Cable |  |  |
|---------------|---|--|--|
| 1             | TMDS RX2-                                 |  |  |
| 2             | TMDS RX2+                                 |  |  |
| 3             | TMDS Ground                               |  |  |
| 4             | Floating                                  |  |  |
| 5             | Floating                                  |  |  |
| 6             | DDC Clock                                 |  |  |
| 7             | DDC Data                                  |  |  |
| 8             | Floating                                  |  |  |
| 9             | TMDS RX1-                                 |  |  |
| 10            | TMDS RX1+                                 |  |  |
| 11            | TMDS Ground                               |  |  |
| 12            | Floating                                  |  |  |
| 13            | Floating                                  |  |  |
| 14            | +5V/+3.3V power                           |  |  |
| 15            | Self test                                 |  |  |

| 16 | Hot Plug Detect |
|----|-----------------|
| 17 | TMDS RX0-       |
| 18 | TMDS RX0+       |
| 19 | TMDS Ground     |
| 20 | Floating        |
| 21 | Floating        |
| 22 | TMDS Ground     |
| 23 | TMDS Clock+     |
| 24 | TMDS Clock-     |

### Plug and Play Capability

You can install the monitor in any Plug and Play-compatible system. The monitor automatically provides the computer system with its Extended Display Identification Data (EDID) using Display Data Channel (DDC) protocols so the system can configure itself and optimize the monitor settings. Most monitor installations are automatic; you can select different settings if desired. For more information about changing the monitor settings, see Operating the Monitor.

#### **LCD Monitor Quality and Pixel Policy**

During the LCD monitor manufacturing process, it is not uncommon for one or more pixels to become fixed in an unchanging state. The visible result is a fixed pixel that appears as an extremely tiny dark or bright discolored spot. In almost every case, these fixed pixels are hard to see and do not detract from display quality or usability. A display with 1 to 5 fixed pixels is considered normal and within competitive standards. For more information, see Dell Support site at: support.dell.com.

#### **Maintenance Guidelines**

#### **Cleaning Your Monitor**



CAUTION: Read and follow the safety instructions before cleaning the monitor.



CAUTION: Before cleaning the monitor, unplug the monitor power cable from the electrical outlet.

For best practices, follow the instructions in the list below while unpacking, cleaning, or handling your monitor:

- To clean your antistatic screen, lightly dampen a soft, clean cloth with water. If possible, use a special screen-cleaning tissue or solution suitable for the antistatic coating. Do not use benzene, thinner, ammonia, abrasive cleaners, or compressed air.
- Use a lightly-dampened, warm cloth to clean the monitor. Avoid using detergent of any kind as some detergents leave a milky film on the monitor. If you notice white powder when you unpack your monitor, wipe it off with a cloth.
- Handle your monitor with care as dark-colored monitors may scratch and show white scuff marks more than light-colored monitors.
- To help maintain the best image quality on your monitor, use a dynamically changing screen saver and turn off your monitor when not in use.

# **Setting Up the Monitor**

Dell™ E2009W/E2209W Flat Panel Monitor User's Guide

- Attaching the Stand
- Connecting the Monitor
- Organizing the Cables
- Attaching the Soundbar (optional)
- Removing the Stand
- Wall Mounting (Optional)

### Attaching the Stand

**NOTE:** The stand is detached from monitor when they are shipped from the factory.



Place the stand on a flat surface and follow these steps to attach the monitor stand:

- 1. Fit the groove on the back of the monitor to the two tabs on the upper part of the stand.
- 2. Lower the monitor so that the monitor mounting area snaps on to or locks on to the stand.

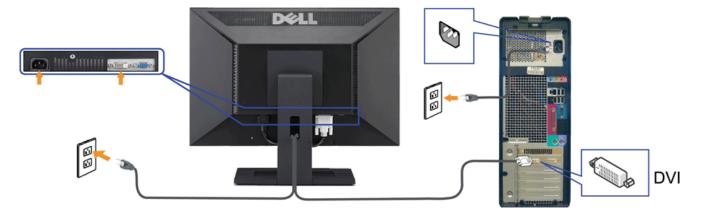
## **Connecting Your Monitor**

**ACAUTION**: Before you begin any of the procedures in this section, follow the Safety Instructions.

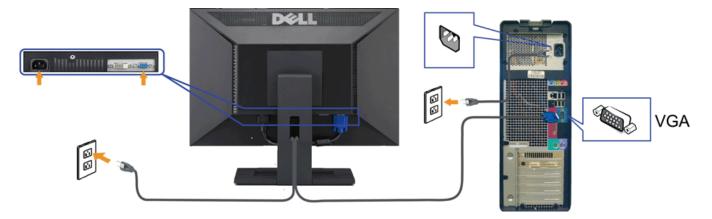
To connect your monitor to the computer:

- 1. Turn off your computer and disconnect the power cable.
- 2. Connect either the white (digital DVI-D) or the blue (analog VGA) display connector cable to the corresponding video port on the back of your computer. Do not connect both cables on the same computer. Use both the cables only when they are connected to two different computers with appropriate video systems.

Connecting the White DVI Cable



#### **Connecting the Blue VGA Cable**



**CAUTION:** The graphics are used for the purpose of illustration only. Appearance of the computer may vary.

# **Organizing the Cables**



After attaching all necessary cables to your monitor and computer, (See Connecting Your Monitor for cable attachment,) use the cable management slot to organize all cables as shown above.

## Attaching the Soundbar (optional)





- NOTICE: Do not use with any device other than Dell Soundbar.
- 1. Working from the rear of the monitor, attach the Dell Soundbar by aligning the two slots with the two tabs along the bottom rear of the monitor.
- 2. Slide the Dell Soundbar to the left until it snaps into place.
- 3. Connect the Soundbar with the power brick.
- 4. Plug the power cables of the power brick into a nearby outlet.
- 5. Insert the lime-green mini stereo plug from the rear of the Soundbar into the computer's audio output jack.

# **Removing the Stand**

NOTE: To prevent scratches on the LCD screen while removing the stand, ensure that the monitor is placed on a clean surface.

To remove the stand:



- 1. Press and hold the stand release button.
- 2. Lift the stand up and away from the monitor .

# Wall Mounting (Optional)





(Screw dimension: M4 x 10mm).

Refer to the instructions that come with the VESA compatible base mounting kit.

- 1. Place the monitor panel on soft cloth or cushion on stable flat table.
- 2. Remove the stand
- 3. Use a screwdriver to remove the four screws securing the plastic cover.
- 4. Attach the mounting bracket from the wall mounting kit to the LCD.
- 5. Mount the LCD on the wall by following the instructions that come with the base mounting kit.

NOTE: For use only with UL(expand UL) Listed Wall Mount Bracket with minimum weight/load bearing capacity of 4.36kg.

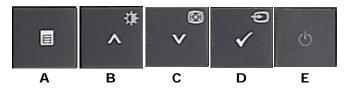
# **Operating the Monitor**

Dell™ E2009W/E2209W Flat Panel Monitor User's Guide

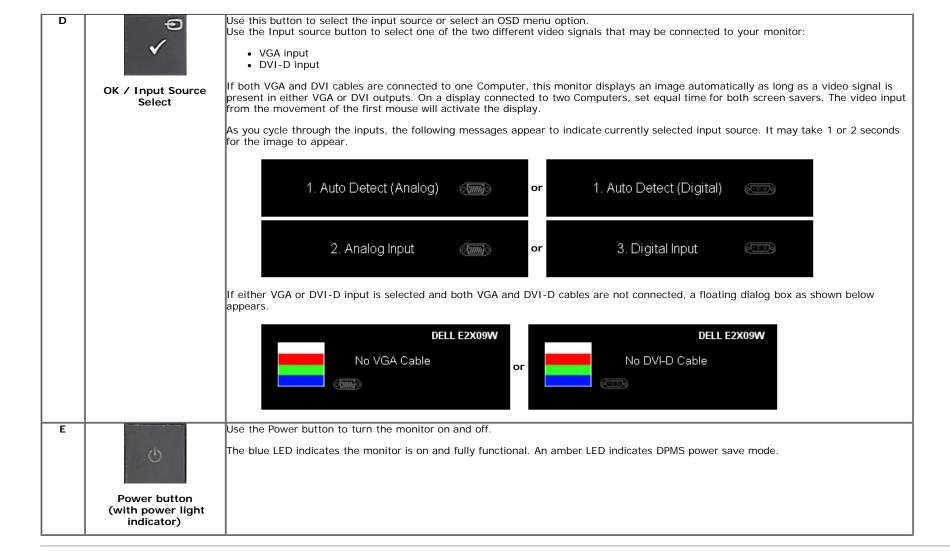
- Using the Front Panel Controls
- Using the On-Screen Display (OSD) Menu
- Setting the Optimal Resolution
- Using the Dell Soundbar (Optional)
- Using the Tilt

## **Using the Front Panel Controls**

Use the control buttons on the front of the monitor to adjust the characteristics of the image being displayed. As you use these buttons to adjust the controls, an OSD shows the numeric values of the characteristics as they change.



| Front panel Button |                         | Description   |
|--------------------|-------------------------|---|
|                    |                         | Use the MENU button to launch the on-screen display (OSD) and select the OSD Menu. See Accessing the Menu System.   |
| В                  | OSD Menu                | Use this button to directly access the "Brightness/Contrast" menu or to increase the values of the selected menu option.  |
|                    | <b>₩</b>                | use this button to directly access the Brightness/Contrast. Thend of to increase the values of the selected mend option.  |
|                    | Brightness/Contrast Hot |   |
|                    | Key                     |   |
|                    |                         | Use Auto Adjust to activate automatic setup/adjustment or to decrease the values of the selected menu option.  Auto Adjustment allows the monitor to self-adjust to the incoming video signal. After using Auto Adjustment, you can further tune your monitor by using the Pixel Clock and Phase controls under Displays Settings.  The following dialog appears on a black screen as the monitor automatically adjusts to the current input: |
|                    | Auto Adjust             |   |
|                    |                         | Auto Adjustment in progress   |
|                    |                         | NOTE: In most cases, Auto Adjust produces the best image for your configuration.  |
|                    |                         | NOTE: AUTO ADJUST option is only available when you are using the analog (VGA) connector.   |



## Using the On-Screen Display (OSD) Menu

### **Accessing the Menu System**

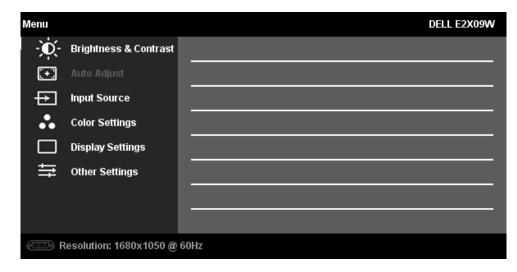
NOTE: If you change the settings and then either proceed to another menu or exit the OSD menu, the monitor automatically saves those changes. The changes are also saved if you change the settings and then wait for the OSD menu to disappear.

1. Push the MENU button to launch the OSD menu and display the main menu.



or

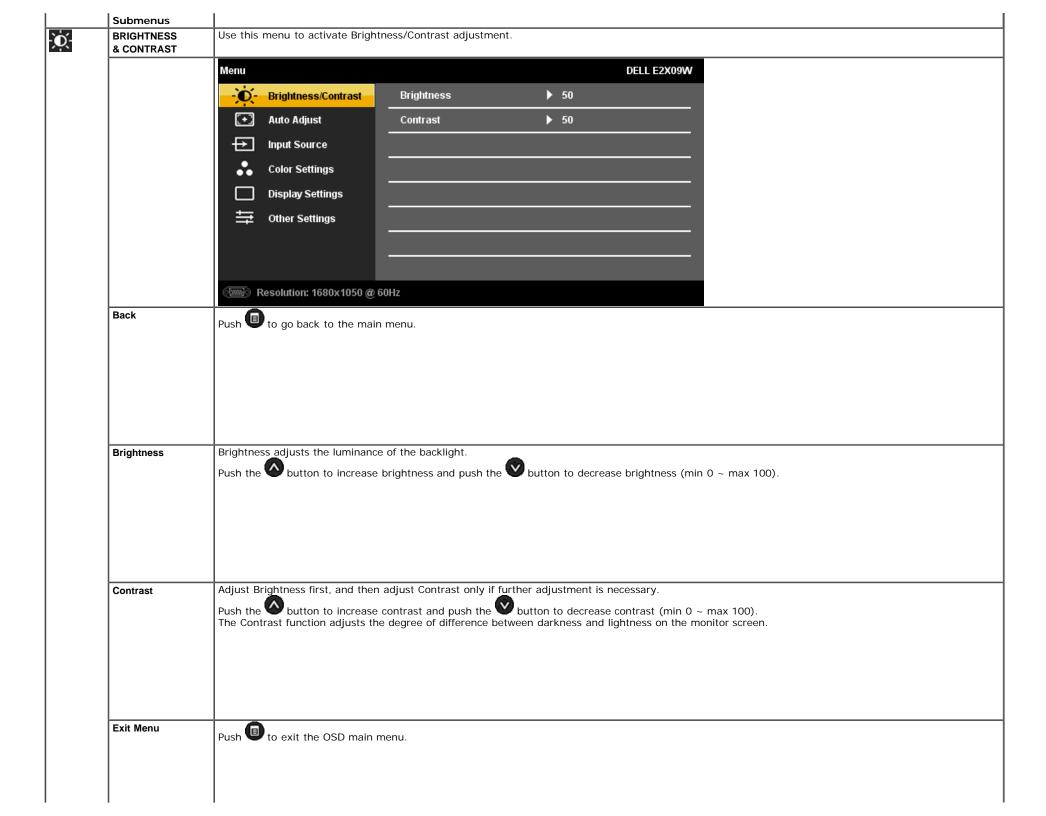
#### Main Menu for Digital (DVI-D) Input

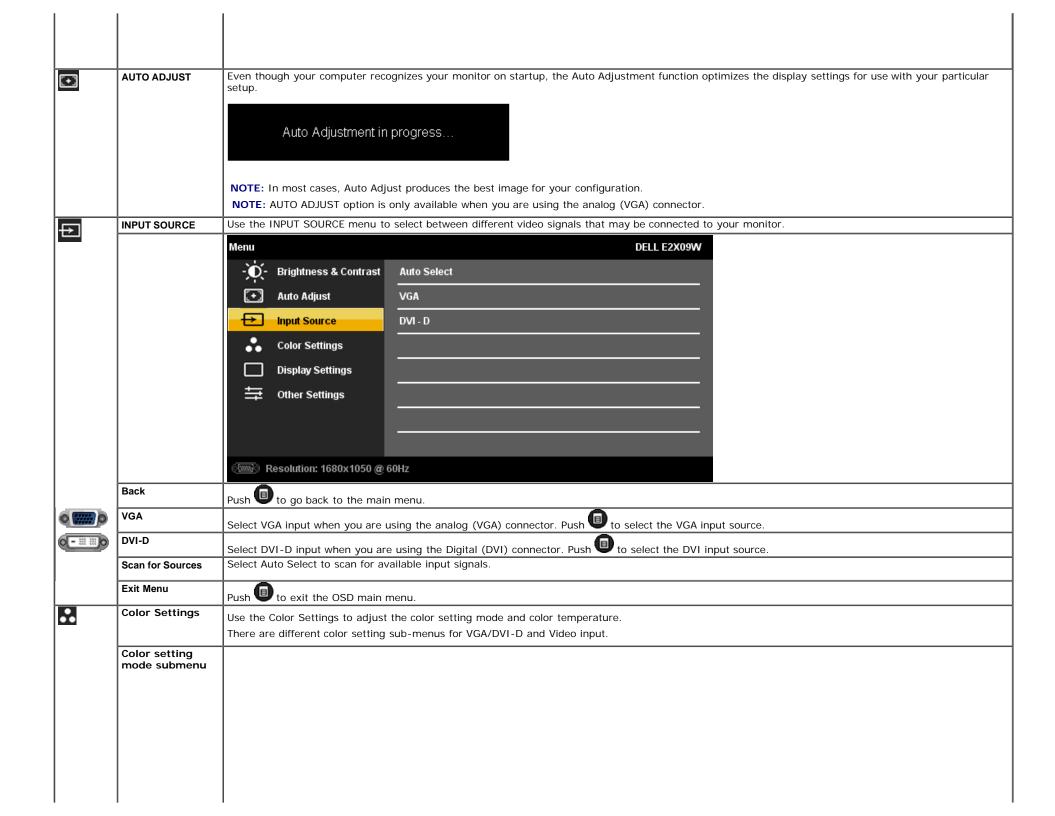


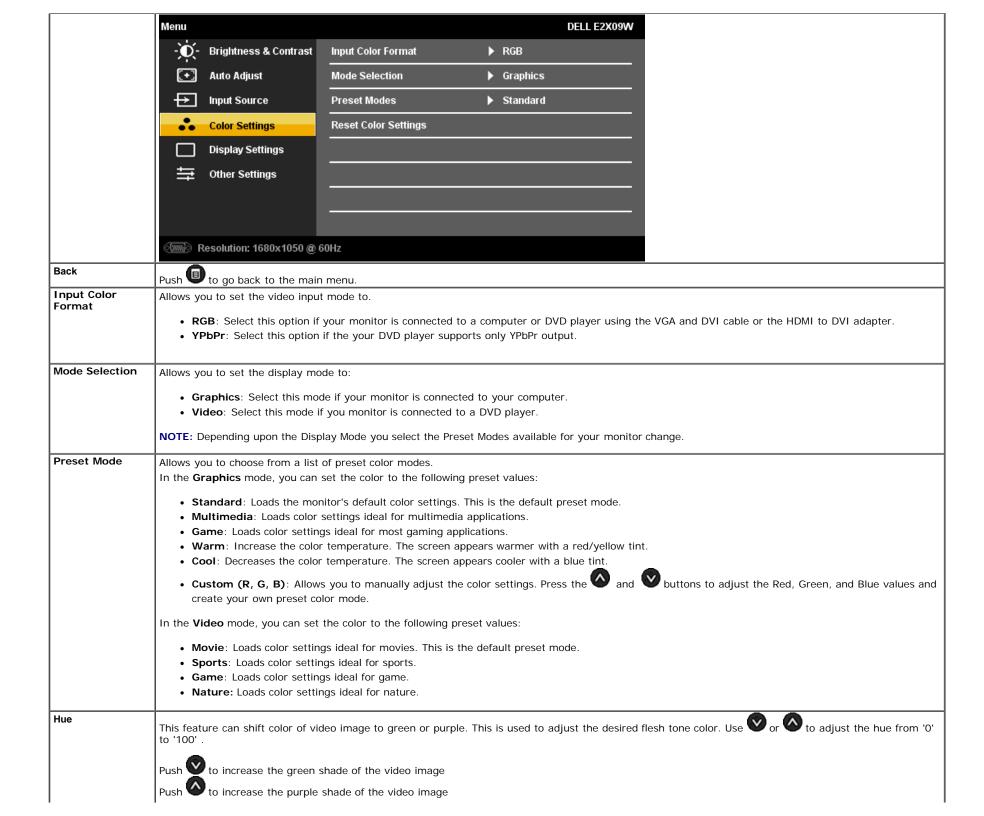
NOTE: AUTO ADJUST is only available when you use the analog (VGA) connector.

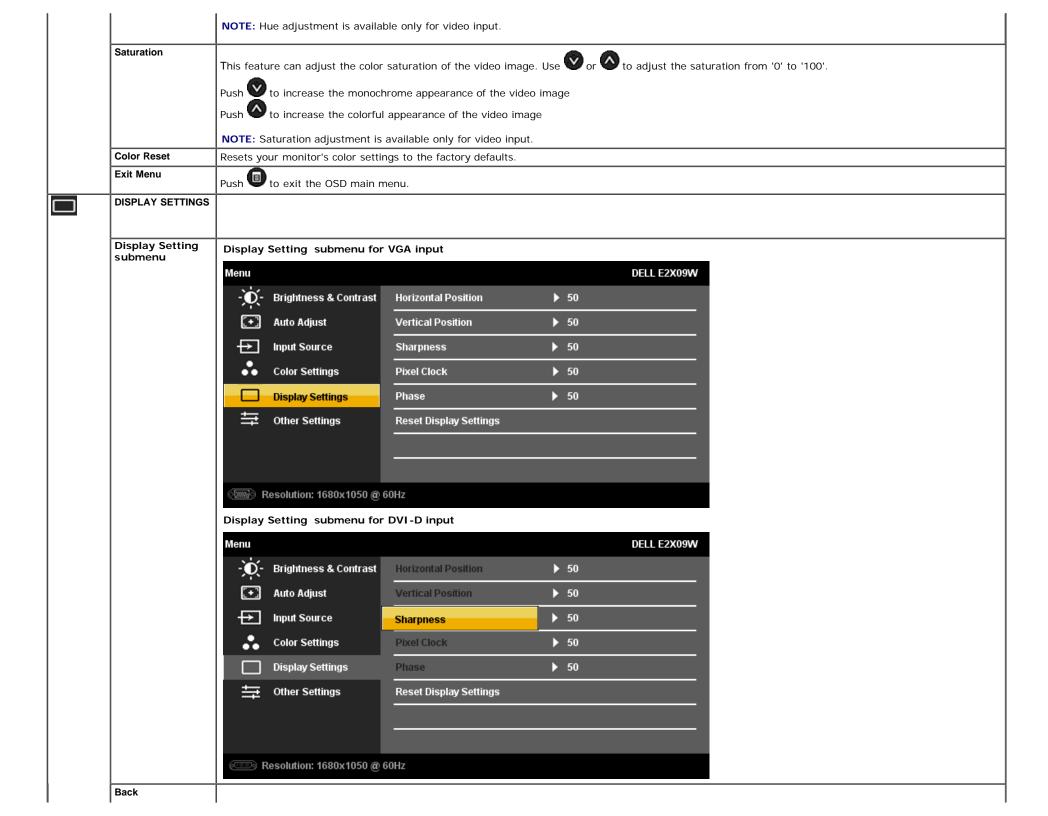
- Push the and buttons to move between the setting options. As you move from one icon to another, the option name is highlighted. See the following table for a complete list of all the options available for the monitor.
- 3. Push the button once to activate the highlighted option.
- 4. Push the and buttons to select the desired parameter.
- 5. Push to enter the slide bar and then use the or button, according to the indicators on the menu, to make your changes.
- 6. Press the Menu button once to return to the main menu to select another option or press the Menu button two or three times to exit from the OSD menu.

| Icon | Menu and | Description |
|------|----------|-------------|



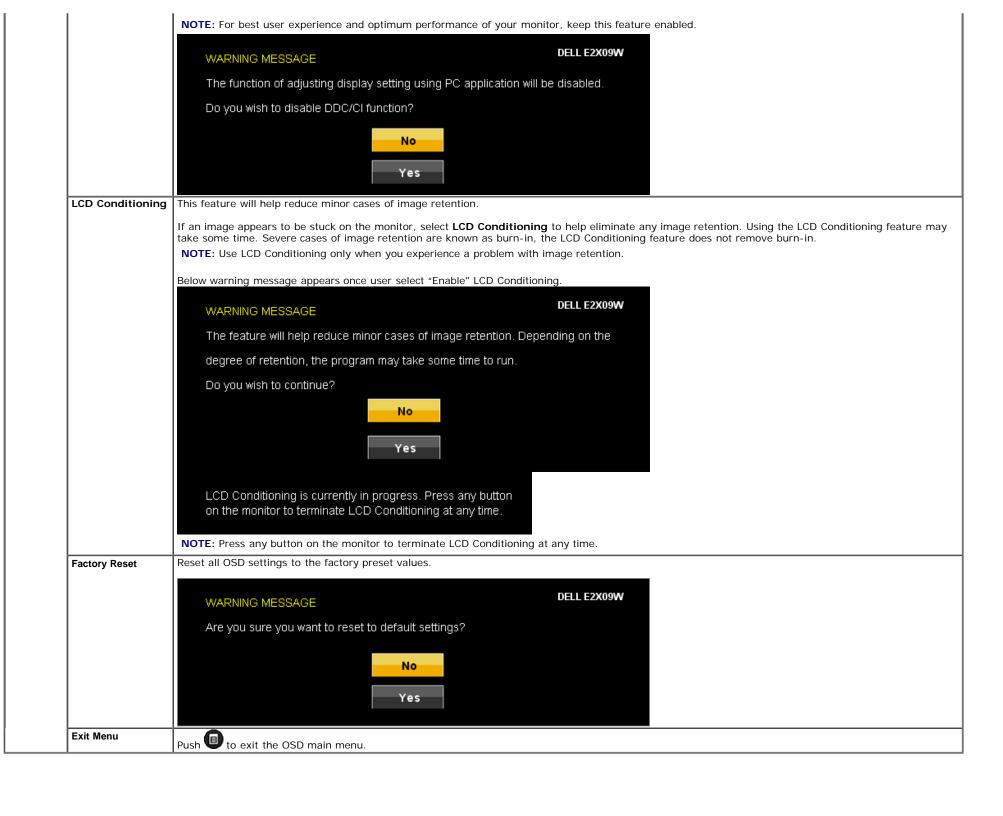






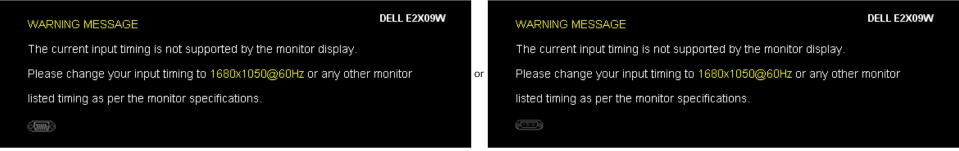
|                     | Push to go back to the main menu.   |  |  |
|---------------------|---|--|--|
| Horizontal Position | Use the and buttons to adjust image left and right. Minimum is '0' (-). Maximum is '100' (+).  NOTE: When using a DVI source, the Horizontal Position setting is not available.                               |  |  |
| Vertical Position   | Use the and buttons to adjust image up and down. Minimum is '0' (-). Maximum is '100' (+).  NOTE: When using a DVI source, the Vertical Position setting is not available.                                    |  |  |
| Sharpness           | This feature can make the image look sharper or softer. Use or to adjust the sharpness from '0' to '100'.   |  |  |
| Pixel Clock         | The Phase and Pixel Clock adjustments allow you to adjust your monitor to your preference.  |  |  |
|                     | Use the and buttons to adjust for best image quality.   |  |  |
| Phase               | If satisfactory results are not obtained using the Phase adjustment, use the Pixel Clock (coarse) adjustment and then use Phase (fine), again.  |  |  |
|                     | NOTE: Pixel Clock and Phase Adjustments are only available for "VGA" input.   |  |  |
| Display Reset       | Reset the image to the original factory setting.  |  |  |
| Exit Menu           | Push to exit the OSD main menu.   |  |  |
| OTHER<br>SETTINGS   |   |  |  |
|                     | Menu DELL E2X09W  |  |  |
|                     | - D- Brightness & Contrast Language   |  |  |
|                     | Auto Adjust Menu Transparency > 20  |  |  |
|                     | Input Source Menu Timer > 30  |  |  |
|                     | Color Settings Menu Lock Unlock   |  |  |
|                     | □ Display Settings □ DDC/CI ▶ Enable  |  |  |
|                     |   |  |  |
|                     | Factory Reset Reset All Settings  |  |  |
|                     |   |  |  |
|                     | ( Resolution: 1680x1050 @ 60Hz  |  |  |
| Back                | Push to go back to the main menu.   |  |  |
| Language            | Language option to set the OSD display to one of seven languages (English, Espanol, Français, Deutsch, Brazilian Portuguese, Japanese, or Simplified Chinese).  |  |  |
| Menu Transparency   | This function is used to change the OSD background from opaque to transparent.  |  |  |
| Menu Timer          | OSD Hold Time: Sets the length of time the OSD will remain active after the last time you pressed a button.   |  |  |
|                     | Use the and buttons to adjust the slider in 1 second increments, from 5 to 60 seconds.  |  |  |
| Menu Lock           | Controls user access to adjustments. When 'Lock' is selected, no user adjustments are allowed. All buttons are locked except 📵 button.  |  |  |
|                     | NOTE: When the OSD is locked, pressing the menu button will take the user directly to the OSD settings menu, with 'OSD Lock' pre-selected on entry.   |  |  |
|                     | Press and hold button for 15 seconds to unlock and allow user access to all applicable settings.  |  |  |
| DDC/CI              | DDC/CI (Display Data Channel/Command Interface) allows your monitor parameters (brightness, color balance etc) to be adjustable via software on your PC. You can disable this feature by selecting "Disable". |  |  |
|                     | You can disable this feature by selecting Disable. The following warning message appears: Select Yes to disable DDC/CI and No to exit with out making changes.  |  |  |

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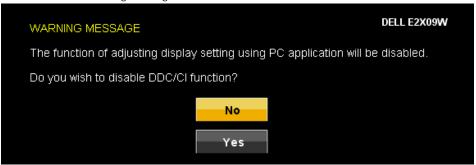
### **OSD Warning Messages**

One of the following warning messages may appear on the screen indicating that the monitor is out of synchronization.



This means that the monitor cannot synchronize with the signal that it is receiving from the computer. See <u>Monitor Specifications</u> for the Horizontal and Vertical frequency ranges addressable by this monitor. Recommended mode is 1680 X 1050.

You will see the following message before the DDC/CI function is disabled.

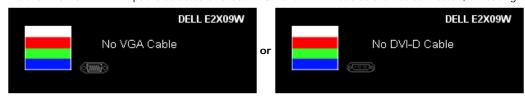


When monitor enters Power Save mode, the following message appears:



Activate the computer and wake up the monitor to gain access to the OSD

If either VGA or DVI-D input is selected and both VGA and DVI-D cables are not connected, a floating dialog box as shown below appears.



See Solving Problems for more information.

### **Setting the Optimal Resolution**

To set the optimal resolution for the monitor:

- 1. Right-click on the desktop and select **Properties**.
- 2. Select the Settings tab.
- 3. Set the screen resolution to 1680 x 1050.
- 4. Click OK.

If you do not see 1680 x 1050 as an option, you may need to update your graphics driver. Depending on your computer, complete one of the following procedures:

- If you have a Dell desktop or portable computer:
  - o Go to support.dell.com, enter your service tag, and download the latest driver for your graphics card.
- If you are using a non-Dell computer (portable or desktop):
  - Go to the support site for your computer and download the latest graphic drivers.
  - Go to your graphics card website and download the latest graphic drivers.

## **Using the Dell Soundbar (Optional)**

The Dell Soundbar is a stereo two channel system, mountable on Dell Flat Panel Displays.



- 1. Power/volume control
- 2. Power indicator
- 3. Headphone connectors

# **Using the Tilt**



You can tilt the monitor to best fit your viewing needs.

### Troubleshooting

Dell™ E2009W/E2209W Flat Panel Monitor User's Guide

- Troubleshooting Your Monitor
- Common Problems
- Product Specific Problems

CAUTION: Before you begin any of the procedures in this section, follow the Safety Instructions

### Troubleshooting Your Monitor

#### **Self-Test Feature Check**

Your monitor provides a self-test feature that allows you to check whether your monitor is functioning properly. If your monitor and computer are properly connected but the monitor screen remains dark, run the monitor self-test by performing the following steps:

- 1. Turn off both your computer and the monitor.
- Unplug the video cable from the back of the computer. To ensure proper Self-Test operation, remove both Digital (white connector) and the Analog (blue connector) cables from the back of computer.
- 3. Turn on the monitor.

The floating dialog box should appear on-screen (against a black background) if the monitor cannot sense a video signal and is working correctly. While in self-test mode, the power LED remains blue. Also, depending upon the selected input, one of the dialogs shown below will continuously scroll through the screen.



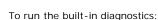


- 4. This box also appears during normal system operation, if the video cable becomes disconnected or damaged.
- 5. Turn off your monitor and reconnect the video cable; then turn on both your computer and the monitor.

If your monitor screen remains blank after you use the previous procedure, check your video controller and computer, because your monitor is functioning properly.

## **Built-in Diagnostics**

Your monitor has a built-in diagnostic tool that helps you determine if the screen abnormality you are experiencing is an inherent problem with your monitor, or with your computer and video card.



- 1. Ensure that the screen is clean (no dust particles on the surface of the screen).
- 2. Unplug the video cable(s) from the back of the computer or monitor. The monitor then goes into the self-test mode.

MOTE: You can run the built-in diagnostics only when the video cable is unplugged and the monitor is in self-test mode.

- 3. Press and hold the 🛡 and \Delta buttons on the front panel, simultaneously for 2 seconds. A gray screen appears.
- 4. Carefully inspect the screen for abnormalities.
- 5. Press the button on the front panel again. The color of the screen changes to red.
- 6. Inspect the display for any abnormalities.
- 7. Repeat steps 5 and 6 to inspect the display in green, blue, and white colored screens.

The test is complete when the white screen appears. To exit, press the button again.

If you do not detect any screen abnormalities upon using the built-in diagnostic tool, the monitor is functioning properly. Check the video card and computer.

#### Common Problems

The following table contains general information about common monitor problems you might encounter and the possible solutions.

| Common Symptoms         | What You   | Possible Solutions  |  |
|-------------------------|------------|---|--|
|                         | Experience |   |  |
| No Video/ Power LED off | No picture | Ensure that the video cable connecting the monitor and the computer is properly connected and secure. |  |

|  |  | <ul> <li>Verify that the power outlet is functioning properly by using any other electrical equipment.</li> <li>Ensure that the power button is depressed fully.</li> </ul>   |  |
|--|--|---|--|
| No Video/ Power LED on   | No picture<br>or no<br>brightness  | Increase brightness & contrast controls via OSD.     Perform monitor self-test feature check.     Check for bent or broken pins in the video cable connector.     Run the built-in diagnostics.   |  |
| Poor Focus   | Picture is<br>fuzzy,<br>blurry, or<br>ghosting                                       | <ul> <li>Perform Auto Adjust via OSD.</li> <li>Adjust the Phase and Pixel Clock controls via OSD.</li> <li>Eliminate video extension cables.</li> <li>Reset the monitor to Factory Settings.</li> <li>Change the video resolution to the correct aspect ration (16:10).</li> </ul>  |  |
| Shaky/Jittery Video  | Wavy<br>picture or<br>fine<br>movement   | <ul> <li>Perform Auto Adjust via OSD.</li> <li>Adjust the Phase and Pixel Clock controls via OSD.</li> <li>Reset the monitor to Factory Settings.</li> <li>Check environmental factors.</li> <li>Relocate the monitor and test in another room.</li> </ul>  |  |
| Missing Pixels   | LCD screen<br>has spots  | <ul> <li>Cycle power on-off.</li> <li>Pixel that is permanently off is a natural defect that can occur in LCD technology.</li> <li>Run the built-in diagnostics.</li> </ul>   |  |
| Stuck-on Pixels  | LCD screen<br>has bright<br>spots  | <ul> <li>Cycle power on-off.</li> <li>Pixel that is permanently off is a natural defect that can occur in LCD technology.</li> <li>Run the built-in diagnostics.</li> </ul>   |  |
| Brightness Problems  | Picture too<br>dim or too<br>bright  | Reset the monitor to Factory Settings.     Auto Adjust via OSD.     Adjust brightness & contrast controls via OSD.  |  |
| Geometric Distortion   | Screen not centered correctly  | Reset the monitor to Factory Settings. Auto Adjust via OSD. Adjust brightness & contrast controls via OSD.  NOTE: When using '2: DVI-D', the positioning adjustments are not available.   |  |
| Horizontal/Vertical Lines  | Screen has<br>one or more<br>lines   | Reset the monitor to Factory Settings. Perform Auto Adjust via OSD. Adjust Phase and Pixel Clock controls via OSD. Perform monitor self-test feature check and determine if these lines are also in self-test mode. Check for bent or broken pins in the video cable connector. Run the built-in diagnostics.   |  |
| Synchronization Problems   | Screen is<br>scrambled<br>or appears<br>torn   | <ul> <li>NOTE: When using '2: DVI-D', the Pixel Clock and Phase adjustments are not available.</li> <li>Reset the monitor to Factory Settings.</li> <li>Perform Auto Adjust via OSD.</li> <li>Adjust Phase and Pixel Clock controls via OSD.</li> <li>Perform monitor self-test feature check to determine if scrambled screen appears in self-test mode.</li> <li>Check for bent or broken pins in the video cable connector.</li> <li>Restart the computer in the safe mode.</li> </ul> |  |
| Safety Related Issues  | Visible signs of smoke or sparks   | Do not perform any troubleshooting steps.     Contact Dell immediately.   |  |
| Intermittent Problems  | Monitor<br>malfunctions<br>on & off  | <ul> <li>Ensure that the video cable connecting the monitor to the computer is connected properly and is secure.</li> <li>Reset the monitor to Factory Settings.</li> <li>Perform monitor self-test feature check to determine if the intermittent problem occurs in self-test mode.</li> </ul>   |  |
| Missing Color  | Picture<br>missing<br>color  | <ul> <li>Perform monitor self-test feature check.</li> <li>Ensure that the video cable connecting the monitor to the computer is connected properly and is secure.</li> <li>Check for bent or broken pins in the video cable connector.</li> </ul>  |  |
| Wrong Color  | Picture color<br>not good  | Change the Color Setting Mode in the Color Settings OSD to Graphics or Video depending to the application. Try different Color Preset Settings in Color Settings OSD. Adjust R/G/B value in Color Settings OSD if the Color Management is turned off. Change the Input Color Format to PC RGB or YPbPr in the Advance Setting OSD. Run the built-in diagnostics.  |  |
| Image retention from a<br>static image left on the<br>monitor for a long period of<br>time | Faint<br>shadow<br>from the<br>static image<br>displayed<br>appears on<br>the screen | Use the Power Management feature to turn off the monitor at all times when it is not in use (for more information, see Power Management Modes).     Alternatively, use a dynamically changing screensaver.  |  |

| Specific Symptoms   | What You Experience  | Possible Solutions  |
|---|--|---|
| Screen image is too small                                     | Image is centered on screen, but does not fill entire viewing area | <ul> <li>Check the Scaling Ratio setting in Image Setting OSD.</li> <li>Reset the monitor to Factory Settings.</li> </ul> |
| Cannot adjust the monitor with the buttons on the front panel | OSD does not appear on the screen                                  | <ul> <li>Turn off the monitor, unplug the power cord, plug back, and then turn<br/>on the monitor.</li> </ul>             |
| The picture does not fill the entire screen.                  | The picture cannot fill the height or width of the screen          | Due to different video formats (aspect ratio) of DVDs, the monitor may display in full screen.                            |

NOTE: When choosing DVI-D mode, the Auto Adjust function is not available.

### **Appendix**

Dell™ E2009W/E2209W Flat Panel Monitor User's Guide

- Safety Instructions
- FCC Notice (U.S. Only) and Other Regulatory Information
- Contacting Dell



# CAUTION: Safety Instructions



CAUTION: Use of controls, adjustments, or procedures other than those specified in this documentation may result in exposure to shock, electrical hazards, and/or mechanical hazards.

For information on safety instructions, see the Product Information Guide.

### FCC Notices (U.S. Only) and Other Regulatory Information

For FCC notices and other regulatory information, see the regulatory compliance website located at: http://www.dell.com/regulatory\_compliance.

### **Contacting Dell**

For customers in the United States, call 800-WWW-DELL (800-999-3355).



NOTE: If you do not have an active Internet connection, you can find contact information on your purchase invoice, packing slip, bill, or Dell product catalog.

Dell provides several online and telephone-based support and service options. Availability varies by country and product, and some services may not be available in your area. To contact Dell for sales, technical support, or customer service issues:

- Visit support.dell.com.
- Verify your country or region in the Choose A Country/Region drop-down menu at the bottom of the page.
- Click Contact Us on the left side of the page.
- Select the appropriate service or support link based on your need.
- Choose the method of contacting Dell that is convenient for you.